

Fees comparison to other States for disposal of low-level radioactive waste

Sources: Information provided by U.S. Ecology and the Washington Department of Ecology to the Northwest Interstate Compact at their meeting on April 9, 2003 in Portland, Oregon. Information available on South Carolina Budget and Control Board , Radioactive Waste Disposal Program website from documents entitled: "Atlantic Compact Rate Schedule, effective June 1, 2003" and "Non-Regional Rate Schedule, effective July 1, 2003 through June 30, 2004"

See: http://www.state.sc.us/energy/PDFs/2004_regional_rate.pdf and http://www.state.sc.us/energy/PDFs/2004_nonregional_rate.pdf

NOTE: Both the U.S. Ecology site near Richland, Washington and the Duratek site at Barnwell, South Carolina are rate regulated by the respective state. In South Carolina, rates are set by the South Carolina Budget and Control Board. In Washington, rates are set by the Washington Utilities and Transportation Commission. The rate schedules determine how much a generator pays for the disposal of waste and how much profit the operator is allowed to retain. The rate schedules also assess regulatory fees and closure cost assessments.



Approved by S.C. Budget and Control Board
Pursuant to 48-46-40(A)(6), S.C.C.

Disposal Rate Schedule for *non*-Atlantic Compact Waste

EFFECTIVE JULY 1, 2001 THROUGH JUNE 30, 2003

1. BASE DISPOSAL CHARGES (not including surcharges)

A. Standard and Special-Nuclear-Material Waste:

a.)	<u>Weight – Density Range</u>	<u>Rate</u>
i.)	Equal to or greater than 120 lbs./ft ³	\$ 4.59 per pound
ii.)	Equal to or greater than 75 lbs./ft ³ and less than 120 lbs./ft ³	\$ 5.05 per pound
iii.)	Equal to or greater than 60 lbs./ft ³ and less than 75 lbs./ft ³	\$ 6.20 per pound
iv.)	Equal to or greater than 45 lbs./ft ³ and less than 60 lbs./ft ³	\$ 8.04 per pound
v.)	Less than 45 lbs./ft ³	\$ 8.04 per pound times the ratio of 45 lbs./ft ³ divided by package density
b.)	Millicurie charge	\$.38 per millicurie

B. Biological Waste

\$ 1.04 per pound
in addition to above
rates

NOTE 1: MAXIMUM MILLICURIE CHARGE IS \$137,808.00 PER SHIPMENT.

NOTE 2: THE MINIMUM CHARGE PER SHIPMENT, EXCLUDING SURCHARGES AND SPECIFIC OTHER CHARGES, IS \$1,000.00.

2. EXTENDED-CARE FUND

Included in Rates

3. SITE STABILIZATION AND CLOSURE FUND

Included in Rates



Approved by S.C. Budget and Control Board
Pursuant to 48-46-40(A)(6), S.C.C.

- C. Decontamination services, if required: \$150 per man hour, plus supplies at current CNS rate.
- D. Customers may be charged for all special services as described in the Barnwell Site Disposal Criteria.
- E. Terms of payment are net 30 days upon presentation of invoices. A per-month service charge of one and one-half percent (1½%) shall be levied on accounts not paid within thirty (30) days.
- F. Company purchase orders or a written letter of authorization in form and substance acceptable to CNS shall be received before receipt of radioactive waste material at the Barnwell Disposal Site and shall refer to CNS Radioactive Material License, the Barnwell Site Disposal Criteria and subsequent changes thereto.
- G. All shipments shall receive a CNS shipment identification number and conform to the Prior Notification Plan.
- H. All radioactive waste shall be packaged in accordance with Department of Transportation and Nuclear Regulatory Commission Regulations in Title 49 and Title 10 of the Code of Federal Regulations, Chem-Nuclear Systems, L.L.C.'s South Carolina Radioactive Material Licenses, Chem-Nuclear Systems, L.L.C.'s Barnwell Site Disposal Criteria, and amendments thereto.



Atlantic Compact Regional Waste Alternative Rate Schedule Effective June 1, 2003

Note: This alternative rate schedule for Atlantic Compact regional waste is issued under authority of Subsection 48-46-40(A)(3), South Carolina Code of Laws, and is applicable to Atlantic Compact waste received for disposal effective June 1, 2003. Pursuant to that subsection, in the event that the Uniform Schedule of Maximum Disposal Rates for Atlantic Compact Regional Waste (see: www.atlanticcompact.org) yields a lower overall rate than this Alternative Rate Schedule, then the rate calculated under the Uniform Schedule will be applied.

Atlantic Compact regional generators who do not specifically select Option B in accordance with the guidelines below will be assessed disposal fees in accordance with Option A.

Option A: Standard Disposal Rate

Applicable to all Class A, B, and C wastes:

Class A: \$315 per cubic foot, plus Atlantic Compact surcharge

Class B: \$350 per cubic foot, plus Atlantic Compact surcharge

Class C: \$375 per cubic foot, plus Atlantic Compact surcharge

Irradiated hardware requiring slit trench disposal:

Use "Maximum Uniform Rate Schedule" to calculate rate

Option B: Volume Discounted Program for Capacity Commitments (applicable only to generators who accept the offer by July 15, 2003)

- Atlantic Compact generators may elect this disposal rate option for waste received through June 30, 2004, in lieu of Option A, the Standard Disposal Rate.
- Waste generators who accept this disposal rate option must reserve specific disposal capacity for Class A waste in writing not later than close of business, July 15, 2003. If Option B is selected by July 15, 2003, it will be applied retroactively to June 1, 2003. Signed reservations should be mailed or faxed to:

D'Juana Wilson
Administrative Coordinator
Radioactive Waste Disposal Program
1201 Main Street, Suite 1010
Columbia, SC 29201

phone 803-737-1706 fax 803-737-1452

- Generators who select this Option will be invoiced at the rate of \$250 per cubic foot for disposal of Class A waste, plus any Atlantic Compact Commission administrative surcharge. In addition, generators who select this rate option will be billed for disposal of Class B and Class C waste (other than irradiated hardware requiring slit trench disposal), in any volume, in accordance with the following scale, plus any Atlantic Compact Commission administrative surcharge.

Cubic feet of Class A reserved per nuclear reactor unit or stand-alone permittee	Class B rate per cubic foot	Class C rate per cubic foot
<500	\$350	\$375
=>500	\$340	\$365
=>750	\$330	\$355
=>1,000	\$320	\$345
=>1,250	\$310	\$335

- Generators who reserve disposal capacity under this option are responsible for meeting the volume commitment by June 30, 2004. At the end of the fiscal year, the disposal site operator will bill generators at the rate of \$250 per cubic foot for any shortfall between the volume of Class A disposal capacity reserved and the volume of Class A waste actually received for disposal.
- Accepting this rate option and reserving a specific volume of disposal capacity for Class A waste does not limit the total volume of waste that a waste generator may ship for disposal. Waste received in excess of the volume reserved will be billed at the rate indicated under Option A.
- Power reactor units or stand-alone non-utility customers which are subsidiaries or units of the same company may pool their reservations by pre-arrangement. Pooling partners should be identified in the reservation letter received not later than July 15. Neither the State of South Carolina nor the disposal site operator will be responsible for reporting or policing the use of pooled capacity by individual generator members of the pool.

NOTES

- Surcharges for the extended care fund and decommissioning trust fund are included in the disposal rates.
- All radioactive waste shall be packaged in accordance with Department of Transportation and Nuclear Regulatory Commission Regulations in Title 49 and Title 10 of the Code of Federal Regulations, Chem-Nuclear Systems, L.L.C.'s South Carolina Radioactive Material Licenses, Chem-Nuclear Systems, L.L.C.'s Barnwell Site Disposal Criteria, and amendments thereto.
- Transport vehicles with additional shielding features may be subject to an additional handling fee which will be provided upon request.

- D. In certain circumstances, the disposal site operator may assess additional charges for necessary services that are not part of and are additional to disposal rates established by the State of South Carolina. These include decontamination services and special services as described in the Barnwell Site Disposal Criteria.
- E. The disposal site operator has established the following policies and procedures which are provided herein for informational purposes:

Terms of payment are net 30 days upon presentation of invoices. A per-month service charge of one and one-half percent (1½%) shall be levied on accounts not paid within thirty (30) days.

Company purchase orders or a written letter of authorization in form and substance acceptable to CNS shall be received before receipt of radioactive waste material at the Barnwell Disposal Site and shall refer to CNS Radioactive Material License, the Barnwell Site Disposal Criteria and subsequent changes thereto.

All shipments shall receive a CNS shipment identification number and conform to the Prior Notification Plan.



Disposal Rate Schedule for *non-Atlantic Compact Waste* Effective July 1, 2003

1. A. BASE DISPOSAL CHARGE (THE MINIMUM BASE DISPOSAL CHARGE PER SHIPMENT IS \$1,000.00)*

lbs per cubic foot =>	\$ per pound	lbs per cubic foot =>	\$ per pound	lbs per cubic foot =>	\$ per pound	lbs per cubic foot =>	\$ per pound
140	\$4.55	70	\$5.80	40	\$9.00	16	\$18.00
120	\$4.65	65	\$6.10	35	\$9.50	14	\$22.00
100	\$4.80	60	\$6.50	30	\$10.00	12	\$26.00
90	\$4.95	55	\$7.30	25	\$12.00	10	\$32.00
80	\$5.10	50	\$8.00	20	\$13.50	8	\$40.00
75	\$5.20	45	\$8.50	18	\$15.25	**6	\$55.00

* Generators who have entered into Special Disposal Rate Agreements based on the Disposal Rate Schedule for non-Atlantic Compact Waste may pay a base disposal charge of .9 times the per-pound charge indicated in the table for applicable waste other than irradiated hardware and large components.

** Less than 6 lbs per cubic foot upon request.

B. DOSE RATE MULTIPLIER ON BASE DISPOSAL CHARGE ABOVE

Dose Level	Multiplier on Base Disposal Charge
0 mR/hr - 1R/hr	1.00
>1R/hr - 2R/hr	1.08
>2R/hr - 3R/hr	1.17
>3R/hr - 4R/hr	1.22
>4R/hr - 5R/hr	1.27
>5R/hr - 10R/hr	1.32
>10R/hr - 25R/hr	1.37
>25R/hr - 50R/hr	1.42
>50R/hr	1.48

2. MILLICURIE CHARGE: \$.38 per millicurie, up to a maximum of \$138,000 per shipment.

3. SURCHARGES

A. Biological Waste: \$1.04 per pound

B. Irradiated Hardware Charges (applicable where shipment requires shut-down of other disposal operations): \$52,200.00 per shipment

C. Special Nuclear Material Surcharge: \$10.44 per gram

D. Atlantic Compact Commission administrative surcharge: \$6 per cubic foot

(Subject to change during year)

4. NOTES

- A. Surcharges for the extended care fund and decommissioning trust fund are included in the disposal rates.
- B. All radioactive waste shall be packaged in accordance with Department of Transportation and Nuclear Regulatory Commission Regulations in Title 49 and Title 10 of the Code of Federal Regulations, Chem-Nuclear Systems, L.L.C.'s South Carolina Radioactive Material Licenses, Chem-Nuclear Systems, L.L.C.'s Barnwell Site Disposal Criteria, and amendments thereto.
- C. Large components: Disposal fees for large components (e.g., steam generators, reactor pressure vessels, reactor coolant pumps) will be based on the generally applicable rates, in their entirety, except that the weight and volume used to determine density and weight related charges is calculated as follows:
1. For packages where the large component shell qualifies as the disposal vault per DHEC regulations, weight and volume calculations are based on all sub-components and material contained within the inside surface of the large component shell, including all internals and any stabilization media injected by the shipper, but excluding the shell itself and all incidental external attachments required for shipping and handling;
 2. For packages with a separate shipping container that qualifies as the disposal vault per DHEC regulations, weight and volume calculations are based on the large component, all sub-components and material contained within the inside surface of the shipping container, including any stabilization media injected by the shipper (including that between the large component and the shipping container), but excluding the shipping container itself and all incidental external attachments required for shipping and handling.
- D. Transport vehicles with additional shielding features may be subject to an additional handling fee which will be provided upon request.
- E. In certain circumstances, the disposal site operator may assess additional charges for necessary services that are not part of and are additional to disposal rates established by the State of South Carolina. These include decontamination services and special services as described in the Barnwell Site Disposal Criteria.
- F. The disposal site operator has established the following policies and procedures which are provided herein for informational purposes:

Terms of payment are net 30 days upon presentation of invoices. A per-month service charge of one and one-half percent (1½%) shall be levied on accounts not paid within thirty (30) days.

Company purchase orders or a written letter of authorization in form and substance acceptable to CNS shall be received before receipt of radioactive waste material at the Barnwell Disposal Site and shall refer to CNS Radioactive Material License, the Barnwell Site Disposal Criteria and subsequent changes thereto.

All shipments shall receive a CNS shipment identification number and conform to the Prior Notification Plan.



STATE OF WASHINGTON

DEPARTMENT OF ECOLOGY

P.O. Box 47600 • Olympia, Washington 98504-7600
(360) 407-6000 • TDD Only (Hearing Impaired) (360) 407-6006

December 2, 2002

Commercial Low-Level Radioactive Waste Site Use Permit Fees

In accordance with chapter 173-326 WAC, Commercial low-level radioactive waste disposal - Site use permits, the Department of Ecology is providing notice of the site use permit fees for the period of March 1, 2003, through February 29, 2004. The annual base fee, 1x, has been set at \$424. Site use permit fees for each category are as follows:

<u>CATEGORY</u>	<u>FACTOR</u>	<u>FEE</u>
< 50 cubic feet	1x	\$424
≥50 < 500 cubic feet	2x	\$848
≥500 < 1,000 cubic feet	5x	\$2,120
≥1,000 < 2,500 cubic feet	10x	\$4,240
≥2,500 cubic feet	35x	\$14,840
Nuclear Utilities	100x	\$42,400

For further information please contact Mike Garner at (360) 407-7102.

COMMERCIAL LOW-LEVEL RADIOACTIVE WASTE
STATE OF WASHINGTON
FIELD

DEC 2 2002

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US ECOLOGY, INC.
RICHLAND, WASHINGTON FACILITY
RADIOACTIVE WASTE DISPOSAL
DISPOSAL CHARGES
EFFECTIVE MAY 1, 2003
SCHEDULE A, NINETEENTH REVISION

Note: Rates in this Schedule A are subject to adjustment in accordance with the rate adjustment mechanism adopted in the Washington Utilities and Transportation Commission's Sixth Supplemental Order in Docket No. UR-950619 as extended by Commission Order in Docket Nos. UR-010623 and UR-010706.

A. SITE AVAILABILITY CHARGE

1. Rates

<u>Block</u>	<u>Block Criteria</u>	<u>Annual Charge per Generator</u>
0	No site use at all	\$164
1	Greater than zero but less than or equal to 10 ft ³ and 50 mR/h.....	314
2	Greater than 10 ft ³ or 50 mR/h* but less than or equal to 20 ft ³ and 100 mR/h*	602
3	Greater than 20 ft ³ or 100 mR/h* but less than or equal to 40 ft ³ and 200 mR/h*	1,155
4	Greater than 40 ft ³ or 200 mR/h* but less than or equal to 80 ft ³ and 400 mR/h*	2,219
5	Greater than 80 ft ³ or 400 mR/h* but less than or equal to 160 ft ³ and 800 mR/h*	4,264
6	Greater than 160 ft ³ or 800 mR/h* but less than or equal to 320 ft ³ and 1,600 mR/h*	8,180
7	Greater than 320 ft ³ or 1,600 mR/h* but less than or equal to 640 ft ³ and 3,200 mR/h*	15,746
8	Greater than 640 ft ³ or 3,200 mR/h* but less than or equal to 1,280 ft ³ and 6,400 mR/h*	30,163
9	Greater than 1,280 ft ³ or 6,400 mR/h* but less than or equal to 2,560 ft ³ and 12,800 mR/h*	57,872
10	Greater than 2,560 ft ³ or 12,800 mR/h* but less than or equal to 5,120 ft ³ and 25,600 mR/h*	111,451
11	Greater than 5,120 ft ³ or 25,600 mR/h*	125,548

* For purposes of determining the site availability charge, mR/hour is calculated by summing the mR per hour at container surface of all containers received during the year.

2. Exemptions

a. As to waste which is generated for research, medical or educational purposes, educational research institutions shall be placed in a rate block for the site availability charge which is one (1) lower than what would otherwise apply through application of the block criteria shown above. "Educational research institution" means a state or independent, not-for-profit, post-secondary educational institution.

b. As to waste which arises as residual or secondary waste from brokers' provision of compaction or processing services for others, if application of the block criteria shown above would place a broker in a rate block for the site availability charge which is greater than Block No. 7, such broker shall be placed in the rate block which is the greater of (i) Block No. 7, or (ii) the block which is two (2) lower than what would otherwise apply through application of the block criteria shown above. "Brokers" are those customers holding the "broker" classification of site use permits issued by the Department of Ecology.

3. Payment Arrangements

a. Initial Determination

Initial determination as to the applicable rate block for each customer shall be based on projections provided by customers prior to the beginning of each calendar year. For those customers who do not intend to ship waste to the facility during the calendar year (those assigned to block No. 0) and for those customers who are initially determined to fall into block Nos. 1-2, the entire site availability charge for the year will be due and payable as of January 1. For those customers who are initially determined to fall into block Nos. 3-8, the entire site availability charge will also be due and payable as of January 1, although those customers may make special arrangements with the Company to pay the charge in equal installments at the beginning of each calendar quarter. For those generators who are initially determined to fall in block Nos. 9-11, 1/12 of the site availability charge will be due and payable as of the beginning of each calendar month. These customers may pay in advance if they wish.

b. Reconciliation

The site availability charge is assessed on the basis of actual volume and dose rate of waste delivered during the calendar year. Assessment of additional amounts, or refunds of overpaid amounts, will be made as appropriate to reconcile the initial determination regarding applicable rate block with the actual volume and dose rates during the calendar year.

(OVER)

SCHEDULE A (Continued)

**US ECOLOGY, INC.
RICHLAND, WASHINGTON FACILITY
RADIOACTIVE WASTE DISPOSAL RATES**

EFFECTIVE MAY 1, 2003

B. DISPOSAL RATES

1. Volume: \$47.10 per cubic foot
2. Shipment: \$7,730 per manifested shipment
3. Container: \$3,920 per container on each manifest.
4. Exposure:

Block No.	Dose Rate at Container Surface	Charge per Container
1	Less than or equal to 200 mR/h	\$ 59
2	Greater than 200 mR/h but less than or equal to 1,000 mR/h.....	4,195
3	Greater than 1,000 mR/h but less than or equal to 10,000 mR/h.....	16,750
4	Greater than 10,000 mR/h but less than or equal to 100,000 mR/h.....	25,000
5	Greater than 100,000 mR/h.....	420,000

EXTRAORDINARY VOLUMES

Waste shipments qualifying as an "extraordinary volume" under RCW 81.108.020(3) are charged a rate equal to 51.5% of the volume disposal rate.

NUCLEAR DECOMMISSIONING WASTE

The volume disposal rate applicable to waste from the decommissioning of nuclear generating units shall be 80% of those set forth above; provided, however, that such waste must satisfy the quantity requirements for "extraordinary volume" under RCW 81.108.020(3).

**SCHEDULE B
Surcharges and Other Special Charges
Fifth Revision**

ENGINEERED CONCRETE BARRIERS

72" x 8' barrier	\$7,422.00 each
84" x 8' barrier	\$8,938.00 each

SURCHARGE FOR HEAVY OBJECTS

The Company shall collect its actual labor and equipment costs incurred, plus a margin thereon of 25%, in handling and disposing of objects or packages weighing more than seventeen thousand five hundred (17,500) pounds.

**SCHEDULE C
Tax and Fee Rider
Fourteenth Revision**

The rates and charges set forth in Schedules A and B shall be increased by the amount of any fee, surcharge or tax assessed on a volume or gross revenue basis against or collected by US Ecology, as listed below:

Perpetual Care and Maintenance Fees	\$1.75 per cubic foot
Business & Occupation Tax	3.3% of rates and charges
Site Surveillance Fee	\$9.00 per cubic foot
Surcharge (RCW 43.200.233).....	\$6.50 per cubic foot
Commission Regulatory Fee	1.0% of rates and charges

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